

# “Digitizing Video”

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- Surprise – I lie, Wrong Title
- 1<sup>st</sup> :
  - Traditional term : implies Analog → Digital
  - Today : Digital All the Way when it is possible
- 2<sup>nd</sup> :
  - It doesn't take 1-1/2 hr, more like 15 min. if everything is setup right
- What's really going to happen
  - PC Health
  - Capture, Editing, Finish
  - Delivery in next workshop

# ATG 2022 Introduction to Digital Video Editing

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May 2002

# Logistics

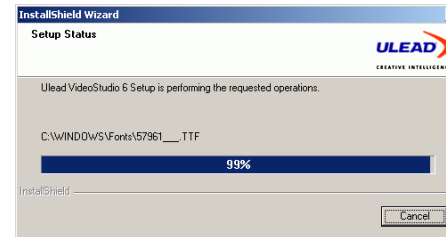
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- Handouts
  - 2.3MB, 24 pages PDF file
  - 0.8MB, 48 pages PDF file from last workshop
- One of the 4 Courseware CD
  - CD1c - East Asian Studies/Health & Exercise
  - CD2k - Foreign Studies/Astronomy
  - CD3s - Science
  - CD4w - Atmospheric Studies/Geography
- Video Studio installed
  - 30-day Trial
  - 4.0, 5.0, 6.0 (SE, VE, DVD, Retail Edition)
  - May requires Windows update
- Tons of disk space
  - 500 MB for VS install
  - 12 MB for DirectX 8.1
  - 415 MB for class files

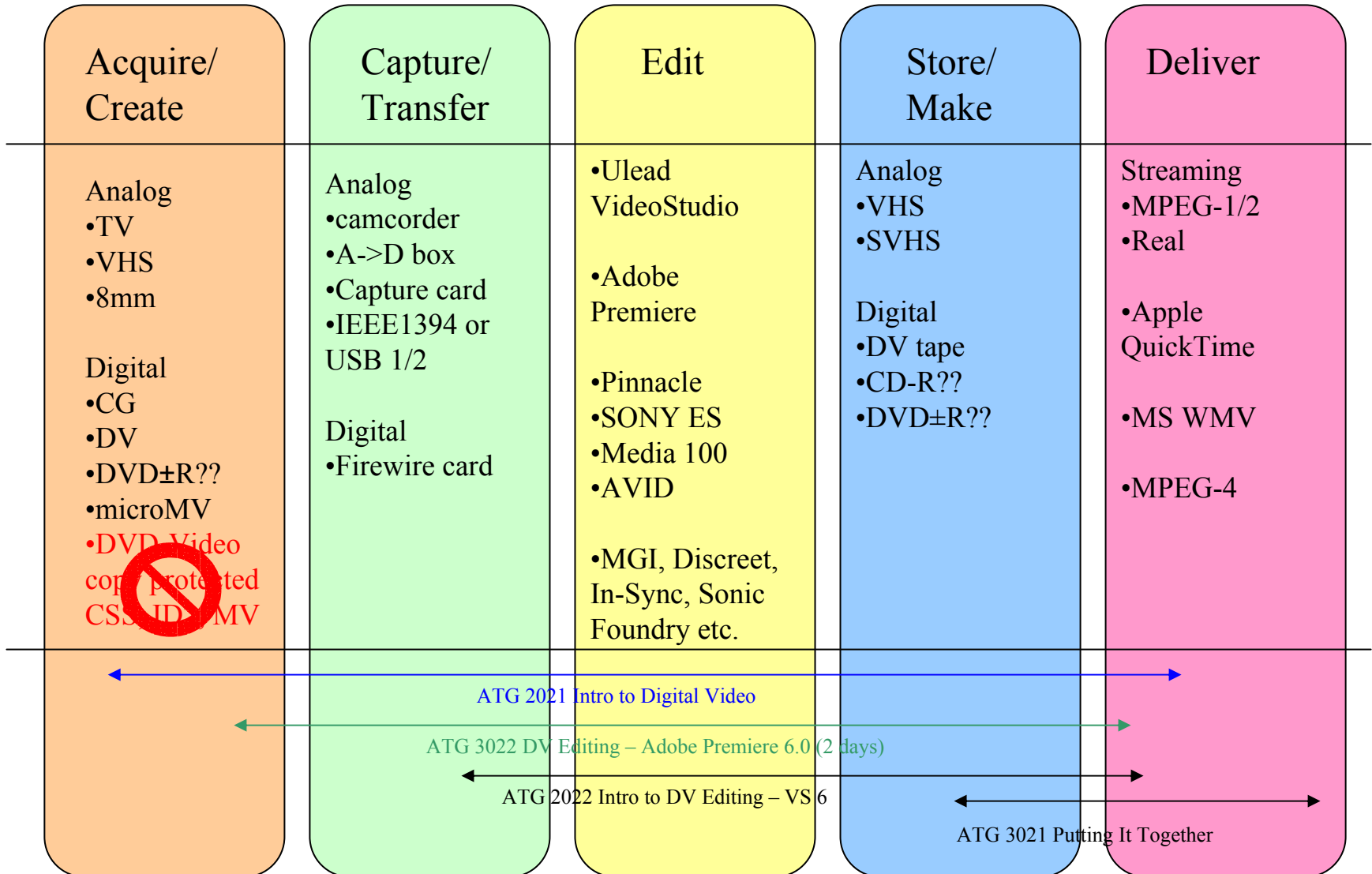
# While you are installing ...



Ulead  
VideoStudio 6



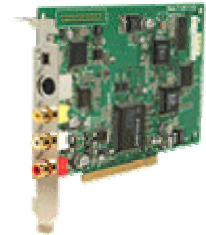
# 5 steps of Video



# Digitizing (from analog sources)

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- Camcorder, iLink box, USB box, PCI card, DV VCR, SVHS VCR, DVD±R\* recorder



# Capturing (from digital sources)

- In principle :
  - A card (~\$70?)
  - Plug into your camcorder or VCR
  - hit the record button in your software



i.LINK® Digital  
Interface



# PC Health

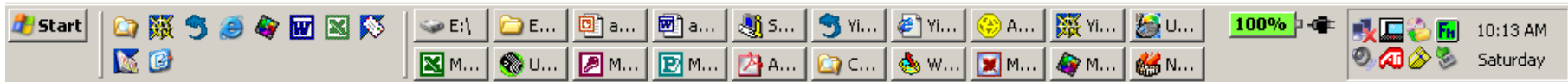
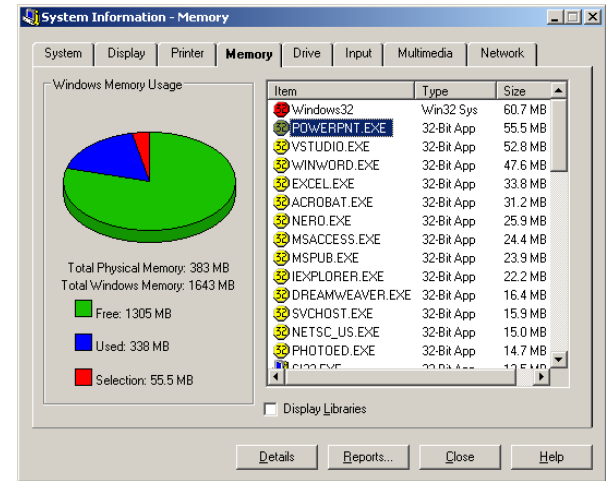
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- One of the most demanding tasks
  - Video Capture, Editing
  - Composition, Visual Effects
  - CGI, 3D modeling, rendering
  - Scientific computation, simulation, visualization
- Similar to burning CD-R in the old days
  - Not optimized system → \$ 20 toaster
- Now
  - 10 minutes into a capture (2.1GB), dropped 14 frames, arrrrhhhhhhh!!!!

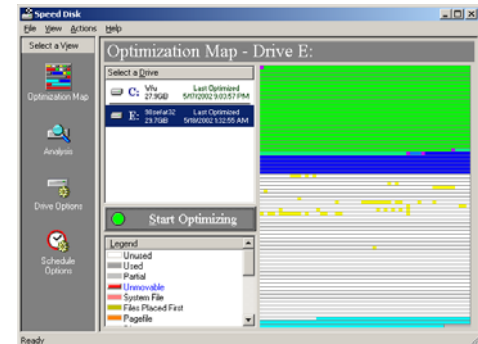
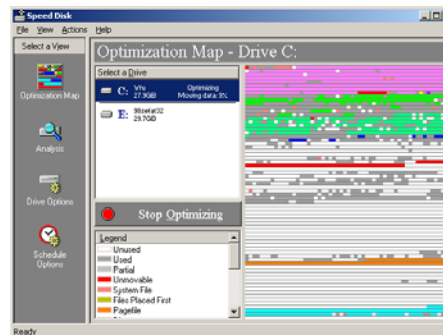


# PC Health (cont'd)

- Background tasks
  - Running Godzilla, Kazaaz, AIM, YIM, MIM?
  - How many items in your system tray and task bar?



- Disk
  - Have you defragment your drive today (this month)?



# Gotchas

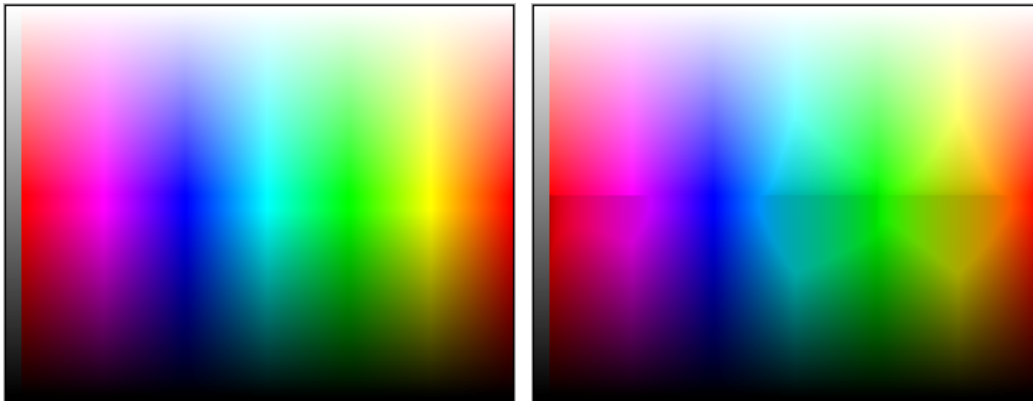
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- Capture failed
  - “It was running Morpheus and Anarchy-online just fine”
  - “I only got 2765 messages left in my Inbox since I got my A21 last August, already deleted 348 before I start.”
  - “the baseball game segment before was doing just fine.”

# NTSC means ....

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- Original source looks like crap on computer
  - “It looks fine on my TV.”
  - “It was a orange stripes soccer uniform.”

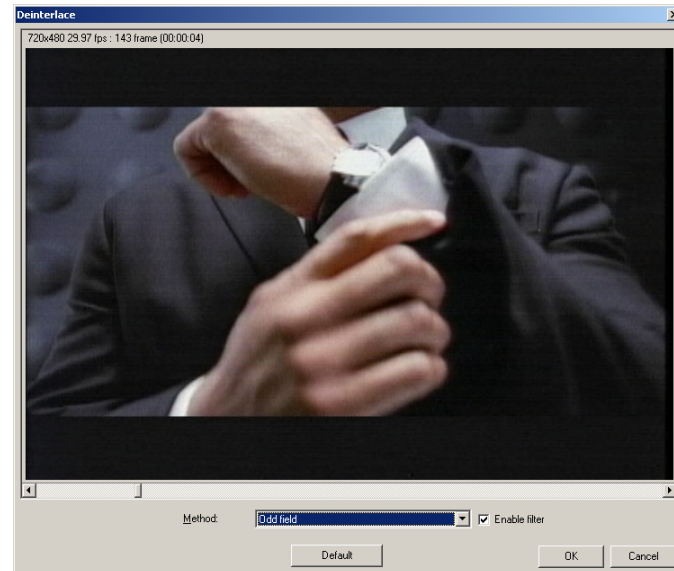
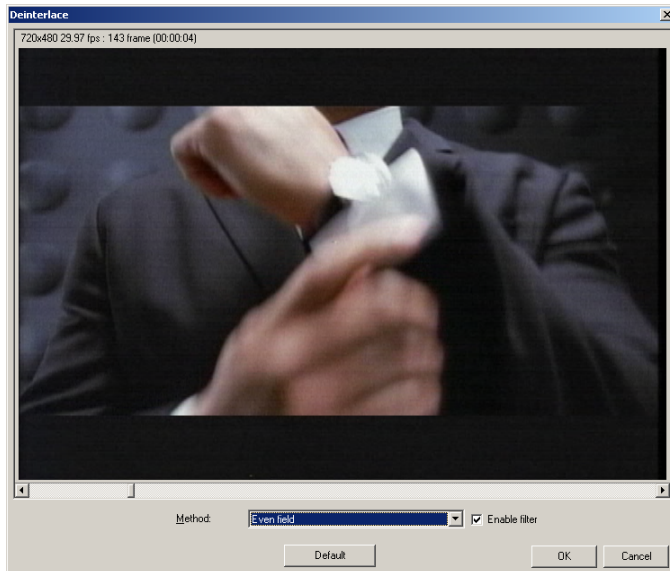
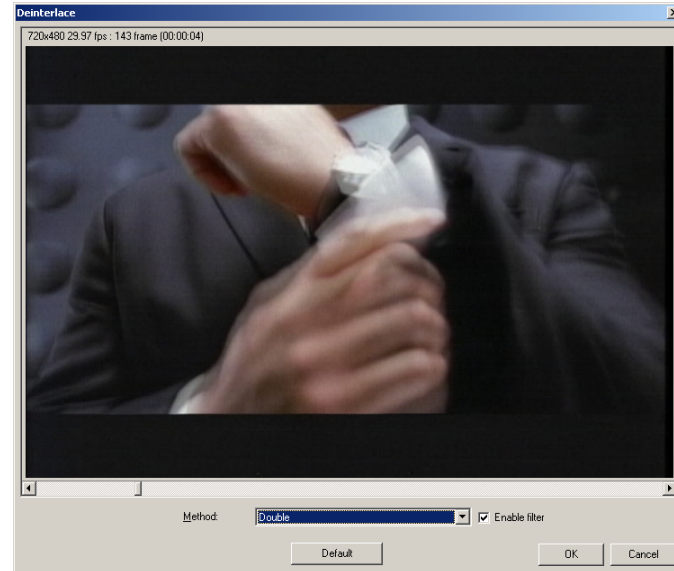
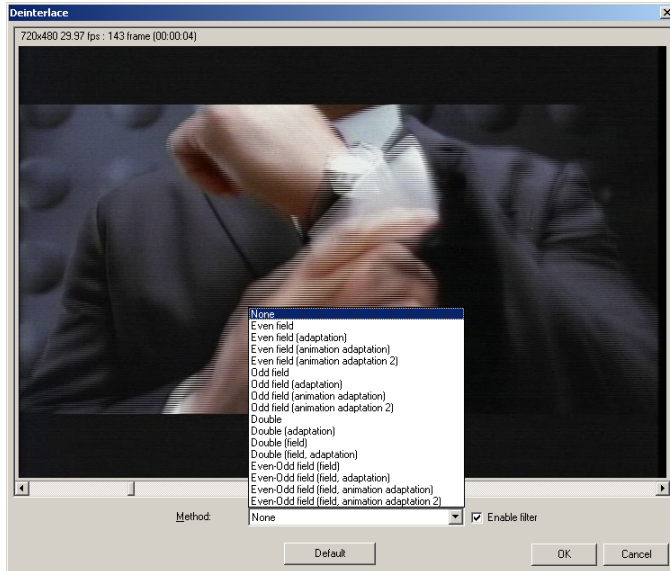


# Interlace & Noise

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# De-Interlace



# Tasks

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- You have 4 video clips (0:45,0:30, 0:30, 0:15).  
Make a one minutes video out of them.
- You will need to trim some of them
- Adjust the video one of them  
(Filter – e.g. Color Balance, Monochrome, or Cropping)
  - Adjust the audio for another (optional)
- Fade in/out (Effect)
  - Overlay another video on top aka PiP (optional)
- Add scrolling title
- Add music
  - Narration (optional)
- Create a MPEG-1/2 file ready to make VCD or DVD in next workshop

# VS 8 Steps

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Start ▼ Capture ▼ Storyboard ▼ Effect Overlay ▼ Title ▼ Audio ▼ Finish ▼

- Start
- Capture
- Storyboard
- Effect
- Overlay
- Title
- Audio
- Finish